



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/820,230	03/29/2001	Shigehisa Fujita	0505-0759P	2172
2292	7590	11/14/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			FERRIS III, FRED O	
			ART UNIT	PAPER NUMBER
			2128	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/820,230	FUJITA, SHIGEHISA	
	<b>Examiner</b>	<b>Art Unit</b>	
	Fred Ferris	2128	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,5-9 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-9 and 13-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. *A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 July 2005 has been entered. Applicants have now cancelled claims 2-4 and 10-12. Claims 1, 5-9, and 13-23 are currently pending in this application and now stand rejected based on new grounds for rejection.*

### **Response to Arguments**

2. *Applicant's arguments with respect to claims 1, 5-9, and 13-23 have been considered but are moot in view of the new ground(s) of rejection. (please see new 102/103 rejections below)*

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**3. Claims 1, 5-9, and 13-23 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by "Getting Started Using ADAMS/Car", Mechanical Dynamics Inc. Copyright 2000. (Hereafter: ADAMS/Car)**

Regarding independent claims 1 and 9: ADAMS/Car discloses a computer implemented method and system for designing virtual vehicle prototype subsystems that can be grouped together in assemblies to form suspension assemblies (i.e. suspension systems). The subsystems are based on ADAMS/Car templates that allow users to change parametric data such as hardpoints (i.e. definition points) and modify parameter variables via input windows. (Chapter 1)

ADAMS/Car anticipates the claimed elements of the present invention as follows:

- method of assisting design of vehicular suspension to generate simulation model for suspension using CAD system: (Chapters: 1, 2, 6)
- indicating suspension to be designed: (Chapter 2, pp. 13, 18-23)
- opening specification value window for entering suspension specification values: (Chapter 2, pp. 22-23, Chapter 6, pp. 123-161)
- opening first analytic window displaying model of suspension and definition points: (Chapter 2, pp. 13, 18-23, Chapter 4, pp. 75-79, Chapter 6, pp. 123-161)
- opening second analytic window displaying model suspension and definition points: (Chapter 2, pp. 13, 18-23, Chapter 4, pp. 75-79, Chapter 6, pp. 123-161)
- entering specification values corresponding to suspension in first or second windows: (Chapter 2, pp. 13, 18-23, Chapter 4, pp. 75-85, Chapter 6, pp. 123-161)

Art Unit: 2128

- reflecting specification values in each of two windows: (Chapter 2, pp. 13, 18-23, Chapter 4, pp. 75-85, Chapter 6, pp. 123-161)

- generating simulation model based on specification values at definition points: (Chapter 2, pp. 39, Chapter 5, pp. 100, Chapter 6, 140)

Per dependent claims 5-8 and 13-16: ADAMS/Car discloses suspension drive system (pp. 86, 93, 137-139, 154-167) entering 3D coordinates, lengths, and angles (Chapter 2, pp. 13, 18-23, Chapter 4, pp. 75-85, Chapter 6, pp. 123-161), and displaying suspension compression/expansion strokes based passenger load (i.e. Kinematic analysis and animation, pp. 24, 32, 84, 163-167).

Per dependent claim 17, 19, and 23: The claimed "highlighting" is an inherent feature in CAD (FEM) or word processing system as a means of "calling attention" to the appearance of display characters which are to be acted on in some way. (See: "highlight" Microsoft Computer Dictionary, 3rd Edition, 1997) The claims "dragging" of related definition points would also (See: "drag, drop" Microsoft Computer Dictionary, 3rd Edition, 1997)

Per dependent claims 18, and 20-22: ADAMS/Car discloses displaying parameter values in multiple (1<sup>st</sup>, 2<sup>nd</sup>) windows and confirming definition points (pp. 39-42, 140-163) as previously noted above.

The examiner notes that while the copyright date of the "Getting Started with ADAMS/Car" reference is 2000, the release date of ADAMS/Car v10.0 software appears to have been prior to October 1999. (See: "Simulating Reality", MSC Software Newsletter Issue 8, page 3, October 1999) *In re Epstein*, 32 F.3d 1559, 31 USPQ2d

*1817 (Fed. Cir. 1994) (Database printouts of abstracts which were not themselves prior art publications were properly relied as providing evidence that the software products referenced therein were "first installed" or "released" more than one year prior to applicant's filing date.) (See; MPEP 2128)*

**4. Claims 1, 5-9, and 13-23 are also rejected under 35 U.S.C. 102(b) as being clearly anticipated by "ADAMS/Car in the Vehicle Development Process Using Suspension and Full Vehicle Features", S.M. Esch, Audi AG Ingolstadt, I/EF-21, November 1997. (Hereafter: Esch)**

Regarding claims 1, 5-9, and 13-23: Esch discloses ADAMS/Car (v10.0) a computer implemented method and system for designing virtual vehicle prototype subsystems that can be grouped together in assemblies to form suspension assemblies (i.e. suspension systems). The subsystems are based on ADAMS/Car templates that allow users to change parametric data such as hardpoints (i.e. definition points) and modify parameter variables via input windows. (pp. 1-11) The opening of parameter and specification entry windows is obviously inherent in ADAMS/Car (v10.0) as noted above. Analytic windows displaying and generating model suspension and definition points are disclosed on pages 5, 7, and 10. Dependent claims 17-19 and 20-23 are rejected using the same reasoning cited above.

**Conclusion**

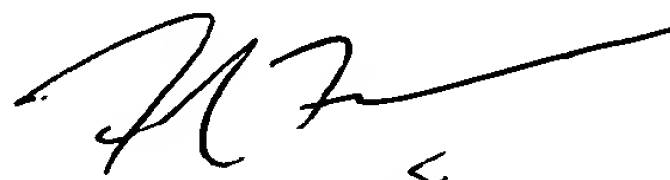
5. *The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Careful consideration should be given prior to applicant's response to this Office Action.*

*"Crash Compatibility of the Ultralight Steel Auto Body with Cars of the Same Size" Aramayo et al, 2000-01-2717, SAE 2000 – teaches LS-DYNA and suspension modeling.*

*"LS-DYNA News", Issue 1/97 February, Livermore Software Technology, 1997 – teaches FEM modeling software using LS-DYNA.*

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Ferris whose telephone number is 571-272-3778 and whose normal working hours are 8:30am to 5:00pm Monday to Friday. Any inquiry of a general nature relating to the status of this application should be directed to the group receptionist whose telephone number is 571-272-3700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached at 571-272-2279. The Official Fax Number is: (703) 872-9306*

*Fred Ferris, Patent Examiner  
Simulation and Emulation, Art Unit 2128  
U.S. Patent and Trademark Office  
Randolph Building, Room 5D19  
401 Dulany Street  
Alexandria, VA 22313  
Phone: (571-272-3778)  
Fred.Ferris@uspto.gov  
November 3, 2005*



*Art 2128*